



**GARVOC-1**

*Exinite Reflectance  
Report*

*Attachment to WCR  
(W562)*

# BEACH PETROLEUM

NO LIABILITY

(Incorporated in South Australia)

POSTAL ADDRESS:  
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4TH FLOOR  
685 BURKE ROAD  
CAMBERWELL, VICTORIA. 3124  
AUSTRALIA

1st September 1983

*Mr Fraser*  
*MLD*  
REC'D  
14/9/83  
w.

The Minister for Minerals and Energy  
Department of Minerals and Energy  
Princes Gate East  
151 Flinders Street  
MELBOURNE Vic 3000

OIL and GAS DIVISION

14 SEP 1983

*R. J. 14/9.*  
Attention: The Director - Oil and Gas Division

Dear Sir

Re: Beach Petroleum Source Rock Study - Otway Basin

Now that the results of the source rock analyses have become available they can be passed on to you. Thirty-five samples were collected from five wells. Those wells were:-

Garvoc-1  
Ferguson Hill-1  
Woolsthorp-1  
Ross Creek-1  
Port Campbell-2

Further, please find (i) specific gravity measurement  
(ii) petrographic description for a basement sample of Moyne Falls Well No. 1.

Yours faithfully  
BEACH PETROLEUM NO LIABILITY

*DG Langton*  
DG Langton  
EXPLORATION MANAGER

SG:cs

REFERRED TO OGD

FOR COMMENT

TO NOTE

FOR REPLY BY.....

NECESSARY ACTION

*[Signature]*  
O.I.C. CENTRAL REGISTRY  
14/9/83

K.K. No.	Depth (m)	$\bar{R}_V$ max	Range	Exinite Fluorescence N	(Remarks)
Eumeralla Formation					
18063	675 Ctgs	0.40	0.36-0.50	4	Rare sporinite, dull yellow to dull orange, rare cutinite, dull orange, rare resinite and suberinite, brown. (Sandstone>limestone>>claystone>coal. Coal rare, V>E>I, duroclarite. Sporinite abundant and resinite common in coal. D.o.m. rare, E>I>V. Exinite, inertinite and vitrinite rare. Abundant shell fragments, carbonate, iron oxides and pyrite.)
18064	779 Ctgs	0.55	0.54-0.56	2	Sample heat altered during drying process. Rare sporinite, yellow/orange, rare cutinite, orange, rare resinite dull yellow/orange, rare phytoplankton yellow to orange. (Sandstone>limestone>claystone>>coal. Coal, rare V>E, clarite. D.o.m. rare, I>E. Vitrinite absent. Abundant iron oxides and pyrite. Recent wood contaminant.)
18065	910 Ctgs	0.54	0.48-0.60	5	Rare sporinite and cutinite, orange to brown, rare resinite, yellow and rare suberinite brown. (Sandstone>carbonate>>claystone>coal. Coal sparse, V>E>I, vitrinite>duroclarite, sporinite abundant, suberinite common and cutinite sparse in coal. D.o.m. rare, V>E>I. Common shell fragments. Abundant iron oxides and pyrite.)
18066	1041 Ctgs	0.48	0.32-0.62	20	Sparse sporinite, yellow to orange, rare cutinite, orange. (Carbonate>sandstone>>claystone>coal. Coal, common, V>I>E, vitrinite>fusite>duroclarite. D.o.m. sparse, E>V>I. Exinite sparse, vitrinite and inertinite, rare. Abundant shells and shell fragments. Sparse pyrite. Abundant recent wood contaminant.)
Geltwood Beach Formation					
18067	1114 Ctgs	0.46	0.33-0.51	8	Sparse sporinite, orange, rare dinoflagellates, green/yellow. (Carbonate>siltstone>sandstone>coal. Coal rare, vitrinite. D.o.m. sparse, E>I>V. Exinite and inertinite sparse, vitrinite rare. Abundant foraminifer tests, shells and shell fragments. Abundant bryozoans. Common pyrite. Recent wood contaminant.)
18068	1224 Ctgs	0.48	0.39-0.55	7	Rare sporinite, yellow/orange to brown, rare cutinite, orange to dull orange, rare suberinite, brown. (Carbonate>claystone>sandstone>coal and shaly coal. Coal rare, V>E>I, vitrinite=duroclarite. Sporinite and suberinite abundant, cutinite common in coal. D.o.m. rare, I>E. Vitrinite absent. Abundant foraminifer tests, shells and shell fragments. Abundant pyrite/marcasite.)

## Garvoc No. 1

K.K. No.	Depth (m)	$\bar{R}_v$ max	Range	N	Exinite Fluorescence (Remarks)
18069	1285 Ctgs	0.47	0.46-0.49	4	Rare sporinite and cutinite, yellow to orange. (Claystone>carbonate=sandstone>>coal. Coal rare, vitrite. D.o.m. sparse, I>E>V. Inertinite sparse, exinite rare to sparse, vitrinite rare. Abundant iron oxides and pyrite. Recent wood contaminant.)
18070	1334 Ctgs	0.52	0.37-0.58	14	Sparse cutinite, yellow to orange and rare sporinite, yellow/orange to orange. (Silty claystone>sandstone>carbonate>coal. Coal rare, vitrite. D.o.m. sparse, I>or=V>E. Vitrinite, inertinite and exinite sparse. Limestone present. Shell fragments common. Abundant iron oxides. Common pyrite. Recent wood contaminant.)
18071	1348 SWC	0.50	0.37-0.60	28	Common sporinite and cutinite, yellow to orange. (Claystone and silty claystone. D.o.m. abundant, V>or=E>I. Vitrinite and exinite common, inertinite sparse to common. Abundant carbonate, iron oxides and pyrite.)  Pretty Hill Sandstone
18072	1388 Ctgs	0.47	0.40-0.51	9	Rare to sparse sporinite and cutinite, orange to dull orange. (Sandstone>>claystone>carbonate>coal. Coal rare, vitrite>duroclarite>durite. Macrinite and sporinite abundant in durite. D.o.m. sparse, I>V>E. Inertinite sparse, vitrinite and exinite rare to sparse. Abundant carbonate and iron oxides. Common pyrite.)
18073	1498 Ctgs	0.52	0.40-0.66	10	Rare sporinite, yellow/orange. (Sandstone>claystone>>carbonate>coal. Coal sparse, I>V, fusite>vitrite. D.o.m. sparse, I>V>E. Inertinite sparse, vitrinite and exinite rare. Common iron oxides and pyrite. Recent wood contaminant.)

## GARVOC NO. 1

Sample No.	Depth (m)	Total Organic Carbon
18063	675 Ctgs	0.95
18064	779 Ctgs	0.41
18065	910 Ctgs	0.39
18066	1041 Ctgs	0.51
18067	1114 Ctgs	0.88
18068	1224 Ctgs	0.43
18069	1285 Ctgs	0.71
18070	1334 Ctgs	0.43
18071	1348 SWC	1.78
18072	1388 Ctgs	0.98
18073	1498 Ctgs	1.74